

isc Silicon PNP Darlington Power Transistor

2SB669

DESCRIPTION

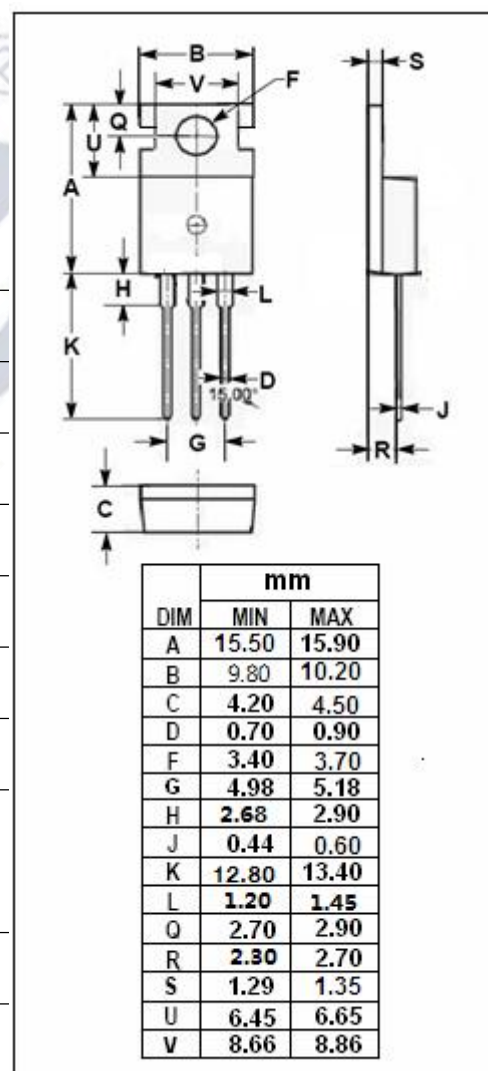
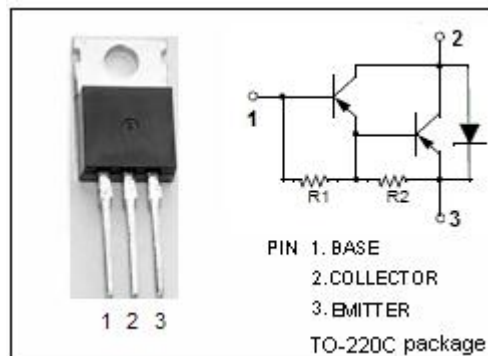
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -70V(\text{Min})$
- High DC Current Gain
: $h_{FE} = 2000(\text{Min}) @ I_C = -1A$
- Low Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in power amplifier and switching applications

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-70	V
V_{CEO}	Collector-Emitter Voltage	-70	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-4	A
I_{CP}	Collector Current-Peak	-6	A
I_B	Base Current-Continuous	-0.3	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	40	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Darlington Power Transistor**2SB669****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA ; I _B = 0	-70			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -2mA; I _C = 0	-5			V
V _{(BR)CBO}	Collector-Base breakdown voltage	I _C =-1mA; I _E = 0	-70			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3A; I _B = -6mA			-2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -3A; I _B = -6mA			-2.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -70V; I _E = 0			-0.1	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = -70V; I _B = 0			-0.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-2	mA
h _{FE -1}	DC Current Gain	I _C = -1A ; V _{CE} = -3V	2000			
h _{FE -2}	DC Current Gain	I _C = -4A ; V _{CE} = -3V	750			